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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,721	07/18/2003	Elliott K. Stava	LEEE 200324	1573
27885	7590	08/22/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			WHITTINGTON, KENNETH	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,721

Applicant(s)

STAVA, ELLIOTT K.

Examiner

Kenneth J. Whittington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6, 18-34 and 36-40 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 8, 10-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) 9 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Bot Ledyne
Primary Examiner

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The Amendment filed June 30, 2005 has been entered and reviewed. In view thereof, the objections to the abstract and claims as contained in the Office Action mailed June 10, 2005 have been withdrawn. Upon further review of the claims in view
6 of the prior art, the status of the application is amended as follows.

Claim Objections

Claim 8 is objected to because of the following informalities: on line 7, the term "l" appears extraneous.
12 Appropriate correction is required.

Claim 30 is objected to because on line 1, "herein" should be "wherein". Appropriate correction is required.

Claim Rejections - 35 USC § 103

18 The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 7, 8, 10-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Migliori et al. (US 6,844,722) in view of Linder (US 5,059,902).

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Regarding claims 1, 8, 11, 12 and 14, Migliori et al. teaches an apparatus and method for determining the thickness of a conductive pipe, comprising:

an induction coil surrounding a path (See FIGS. 3 and 4, item 6);

6 a source of AC current connected across the coil (See FIGS. 3 and 4, item 1);

a first circuit to measure inductive reactance of the coil (See same figures, note circuitry associated with coil 6);

a second circuit to compare the measured inductive reactance with a reference inductive reactance (See FIGS. 3 and 12 4, coil 7 and circuitry associated thereto); and

an output device responsive a difference between the measured inductive reactance and the reference inductive reactance to indicate the magnitude of the physical characteristic (See FIGS. 3 and 4, item 5),

wherein the reference inductive reactance is the inductive 18 reactance across a reference coil with a pre-selected reference core fixed in said reference coil (See col. 3, line 66 to col. 4, line 35) and wherein the reference coil is connected in a bridge with said induction coil and driven mutually by the AC current (See FIG. 1).

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However, Migliori et al. does not explicitly teach the conductive pipes being a solid metal rod. Linder teaches that measuring the linear dimensions of a pipe or rod can be done in the system wherein the pipe or rod is extended through a coil having an oscillating current there through (See Linder col. 11, lines 48-61). It would have been obvious at the time the invention was made to measure the inductance of a rod in lieu of that of a pipe or tube in the apparatus of Migliori et al. and compare it to a reference rod inductance to determine the thickness of the rod. One having ordinary skill in the art would have been motivated to do so because as recognized in Linder, such measurements for rods and pipes are made in a similar manner for determining the linear dimensions (See same paragraph) and use in the apparatus of Migliori et al. will provide a precise comparison of the inductive reactances between a rod and a reference rod to determine particular characteristics of the rod (See Migliori et al. col. 2, line 60 to col. 3, line 8 and remaining disclosure).

Regarding claim 7 and 15, the noted combination teaches the reference inductance reactance is the inductive reactance across a reference coil with a selected reference core fixed therein

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(See FIG. 1, reference coil 6 and reference item 9 and see col. 4, line 58 to col. 5, line 23).

Regarding claim 16 and 10, the reference core is a piece of material having desired characteristics (See Abstract of Migliori et al., note when measuring the linear dimensions, the
6 ideal reference piece would have the ideal linear dimensions, i.e., diameter).

Regarding claim 17, Migliori et al. discloses a visual mechanism to display the magnitude of the physical characteristic (See FIGS. 3 and 4, note oscilloscope 5 and result display at FIGS. 16 and 17).

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Allowable Subject Matter

Claims 2-6, 18-34 and 36-40 are allowed.

Claims 9 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base
18 claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the claims are either allowed or have allowable subject matter because the prior art does not show or teach methods or apparatus measuring the thickness

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characteristic of a cored welding wire, in combination with the other features of the claims.

Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both the new reference of record teach that measuring the diameter of a rod of the thickness of a pipe are carried out in similar apparatus using similar inductance measuring practices (See US 5,729,135 at col. 7, lines 17-21 and see US 6,661,224 at col. 9, line 61 to col. 10, line 12).

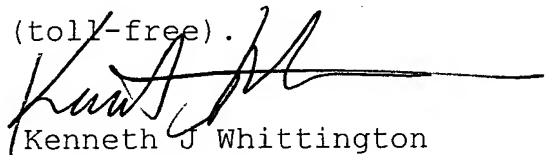
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth J Whittington
Examiner
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